# SHOT BOUNDARY DETECTION

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## ABSTRACT

A video segment is processed to identify frames representing shot

5     boundaries in the video segment. Initially, a partial block-based comparison
technique is used to determine the amount of change (i.e., a first difference) that
occurs between a pair of distant (i.e., not consecutive) frames. Additionally, edge
and/or color differences are computed between the pair of frames to confirm that a
change has occurred. If the change is confirmed, a step variable technique is used

10    to locate the change between two consecutive frames between the distant frames.
If the partial block-based comparison technique obtains a difference between the
consecutive frames that exceeds the first threshold, then an abrupt change is
detected. Otherwise, the edge and/or color differences are used to determine
whether a gradual transition has occurred.